

# UNIVERSAL DRAWBAR INSTRUCTIONS

Retract the quill all the way up and lock the quill. (For C.N.C. mills, move the quill to the normal Z-axis home position).

**Line A:** Remove old drawbar and spacer. Depth mic from top of bearing cap to the top of spindle and subtract  $.050 + .025 - .0$  this is dimension. (See figure #9). **A=** \_\_\_\_\_

-OR-

**Line A:** Scribe a line on the old drawbar even with the top of bearing cap. Remove old drawbar with the spacer and measure from the bottom of the spacer to the scribe line minus  $.050 + .025 - .0$  this is dimension. **A=** \_\_\_\_\_

**Line B:** Length of head from the bottom to the shoulder. **B=** \_\_\_\_\_

**Line C:** Subtract B from A. **C=** \_\_\_\_\_

**Line D:** Add  $.25$  to C. **D=** \_\_\_\_\_

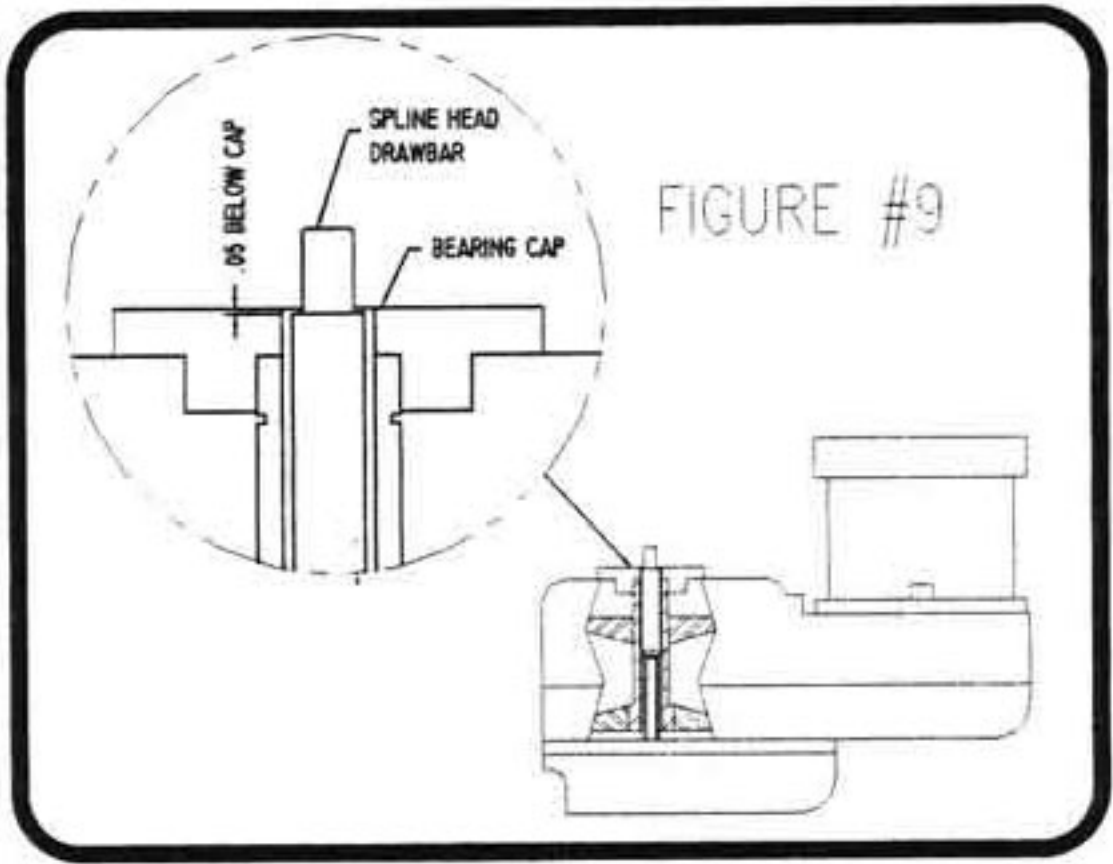
**Line E:** Measure step on old drawbar. **E=** \_\_\_\_\_

**Line F:** With spacer on old drawbar measure from the bottom of the spacer to the end of the threaded end. **F=** \_\_\_\_\_

Machine the spacer blank (provided with the universal kit) to match the blue print of the spacer made in previous steps.

With the new spacer on the new drawbar, check all head dimensions. Measure and mark dimension **F**. Cut excessive amount off threads and chamfer.

Grease spline head, washer top and bottom, and threads on drawbar. Reinstall and proceed with power unit installation.



- A. \_\_\_\_\_
- B. \_\_\_\_\_
- C. \_\_\_\_\_
- D. \_\_\_\_\_
- E. \_\_\_\_\_
- F. \_\_\_\_\_
- G. \_\_\_\_\_

